

see D-1422  
Orders WR 80-20  
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STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of Permits 16597, 16598, )  
16599, and 16600, Issued on )  
Applications 14858, 14859, 19303, and )  
19304, )  
U. S. BUREAU OF RECLAMATION, )  
Permittee. )

ORDER: WR 83-3  
SOURCE: Stanislaus River  
COUNTIES: Calaveras and  
Tuolumne

ORDER AMENDING WATER RIGHT DECISION 1422  
AUTHORIZING STORAGE IN NEW MELONES RESERVOIR  
FOR  
GENERATION OF HYDROELECTRIC POWER AND FOR CONSUMPTIVE USES

BY THE BOARD:

United States Bureau of Reclamation (hereinafter "Bureau" or "permittee") having requested that the State Water Resources Control Board (hereinafter "Board") remove the restrictions on filling New Melones Reservoir contained in Water Right Decision 1422; a public hearing having been held before the Board on February 23 and 24, 1983; permittee and numerous other interested parties having appeared and presented evidence; the evidence received at the hearing having been duly considered, the Board finds as follows:

Background

1. In 1973, the Board adopted Water Right Decision 1422. In Decision 1422, the Board authorized issuance of four water right permits to the Bureau for appropriation of water from the Stanislaus

River at New Melones Dam. The permits authorized appropriations during specified seasons for various uses totaling 2,400,000 acre-feet per annum by storage, and for power purposes totaling 2,400,000 acre-feet per annum by storage. The evidence showed that the Bureau had no immediate irrigation, domestic, municipal or industrial use for the water, and had developed no plan for its use. The evidence also showed that the portion of the Stanislaus River within the inundation area of New Melones Reservoir was valuable for whitewater boating, stream fishing, and other stream-related activities. In order to maintain these values as long as possible, the Board conditioned the permits to require that the permittee must have firm commitments to deliver water for purposes which would require storage in excess of that required for preservation and enhancement of fish and wildlife, maintenance of water quality conditions, and prior rights. Additionally, the Board limited the quantity of water impounded for power generation to that needed for the above purposes.

2. In 1980 the Board adopted Order WR 80-20, interpreting parts of Decision 1422. In Order WR 80-20, the Board found that general conditions relative to need for electrical energy had changed since 1973 when the Board issued Decision 1422. The Board stated that these changes might warrant a reexamination of the question whether, and if so to what extent, storage in New Melones Reservoir should be allowed for hydroelectric generation, regardless of the quantity of water authorized to be stored for consumptive uses. The Board committed itself to hold a further hearing on storage for hydroelectric generation as soon as possible after a request by the Bureau.

3. By letter dated January 14, 1983, the Bureau requested that the Board reconsider the restriction in Decision 1422 against filling New Melones Reservoir for the purpose of hydroelectric power generation. The Bureau also indicated that it had made substantial progress toward executing contracts with purchasers of most of the firm consumptive yield of New Melones Reservoir, and might have some of the contracts fully executed by May 1, 1983. Accordingly, the Board held a hearing on February 23 and 24, 1983, to consider the following key issues:

"1. Should the condition in Order paragraph 2 of Decision 1422 restricting storage of water for generation of hydroelectric power be modified to prevent waste, unreasonable use, or unreasonable diversion of water pursuant to Article X, Section 2 of the California Constitution, California Water Code Section 100, and Condition 13 of Decision 1422? Is a need for additional electrical power sufficiently great to warrant increased storage levels in New Melones Reservoir?

"2. What progress has the United States Bureau of Reclamation made toward establishing firm commitments to deliver water for consumptive uses which would require storage in New Melones Reservoir of more than 438,000 acre-feet of water? Should the Board issue a further order allowing increased storage in New Melones Reservoir for consumptive uses?"

4. The following parties appeared and presented evidence concerning these issues: U. S. Bureau of Reclamation (Bureau), Western Area Power Administration (Western), Sacramento Municipal Utility District and Northern California Power Agency, Tuolumne Regional Water District, Mid-Valley Water Authority, Department of Fish and Game, Tri-Dam Project, South Delta Water Agency, Friends of the River, State Water Contractors, Kern County Water Agency, and California Energy Commission.

Additionally, numerous persons appeared and made policy statements concerning whether the Board should authorize filling New Melones Reservoir at this time.

5. At the time of the hearing the evidence showed that water was being temporarily impounded in New Melones Reservoir for flood control, under release criteria developed by the United States to prevent water damage downstream. No authorization by the Board is required for the United States to impound water in the reservoir for the purpose of flood control. The reservoir on February 22 contained 1,842,000 acre-feet. The Bureau's witness estimated that at the current rates of release and inflow the reservoir storage would within 40 days thereafter reach the level of the Bureau-identified flood control reservation, only 38.5 feet below full reservoir level.

#### Proposed Operation of the Reservoir

6. The Board herein considers whether to authorize the Bureau to store water in New Melones Reservoir for consumptive use purposes, hydroelectric power generation, or both consumptive use purposes and hydroelectric power generation. A description of the reservoir's operation if the Board gives the Bureau no authorization to fill the reservoir is unnecessary, since the Bureau would then be required to operate the reservoir as set forth in Order WR 80-20.

The project's conservation yield that the Bureau will have available to market is 180,000 acre-feet. The Bureau is already obligated to supply 98,000 acre-feet for fish and wildlife enhancement, up to 70,000 acre-feet for water quality control and at least 654,000 acre-feet for downstream prior rights. The conservation

yield, while significant, is an additional 22 percent of the amounts already required to be released. Consequently, operation for consumptive uses may not differ significantly from operation for power generation.

7. If the Bureau is authorized to store water in New Melones Reservoir for the specific purpose of hydroelectric generation, it can be anticipated that the Bureau will attempt to optimize the hydroelectric generation from New Melones Reservoir. The outstanding characteristics of operating in a "power only" mode are maintenance of maximum head on the turbines for maximum productivity and utilization of the full flow of the river to obtain maximum power generation.

In the case of New Melones, the productivity of the turbines is a major consideration. At maximum permitted storage, 2,400,000 acre-feet (water surface elevation 1088 feet) the powerhouse is designed to generate 550 kilowatt hours of electricity for each acre-foot of water released. This productivity falls by about 7 percent to 514 kilowatt hours per acre-foot at storage of 1,970,000 acre-feet (water surface elevation of 1049.5 feet) which is the floor of the Bureau-identified flood control reservation space. The productivity continues to decline with any further lowering of the water surface elevation and at elevation 844 feet (the limitation contained in Decision 1422), productivity declines to 295 kilowatt hours per acre-foot of water released or about 54 percent of the productivity obtainable when the reservoir is full. The water supply in the Stanislaus River is cyclic. To maintain the reservoir full at all times could

result in a loss of power generation. It is therefore reasonable to expect that the Bureau will expend every effort to coordinate inflow and release requirements in order to maintain the reservoir as full as possible to optimize power generation in a manner consistent with maximizing the safe yield of the water supply.

8. If the Bureau is authorized to store water in New Melones Reservoir for the purpose of meeting consumptive use demands, the operation could be somewhat different. However, since the powerhouse is fully operable at this date, allowing operation for any purpose would probably include utilization and optimization of the power generation facilities.

9. If the Bureau is authorized to store water in New Melones Reservoir for purposes of both hydroelectric generation and consumptive use, the operational scheme would be to attempt to conserve storage to maintain "head" on the turbines and optimize long-term water supply yield, while releasing water in amounts sufficient to meet any of the downstream requirements. This mode of operation will be identical to previously discussed "power only" mode of operation unless the Bureau's contract demands for water for consumptive uses require a modification of the releases from New Melones Reservoir over and above those releases already required for fish and wildlife enhancement, water quality control considerations, satisfaction of prior rights and flood control.

#### General Effects of Filling New Melones Reservoir

10. As noted above, New Melones Reservoir had nearly reached the Bureau-identified flood control reservation level at the time of

hearing. On February 22, 1983, the reservoir contained 1,842,000 acre-feet of water and was continuing to fill at the rate of about 3,000 acre-feet per day. It was estimated that the reservoir would reach the flood control reservation level in about 40 days at that rate. Because of current filling for flood control, the entire river canyon which had been valued for recreational, scientific and fish and wildlife uses will be inundated for an indefinite time which could range from several months to several years. The evidence shows that this initial filling of the reservoir has substantially diminished the values protected by Decision 1422, including fish and wildlife, rafting and kayaking, and other stream-related recreation in the river canyon.

11. If the Board does not authorize the Bureau to fill the reservoir above the level authorized in Order WR 80-20, the reservoir water surface likely could not be reduced to elevation 844 feet until September of 1988. If the restrictions on filling contained in Decision 1422 continue to apply beyond 1988, the Bureau would propose to operate the project as shown in USBR Exhibit 15. This operation would allow the water surface to exceed elevation 960 in about 36 percent of the years in the 84-year hydrologic period. Elevation 1050 would be exceeded in about 7 percent of the years. At elevation 960, about 2.4 miles of river canyon would be exposed below the Camp Nine Bridge. At elevation 1050, about 0.5 miles would be exposed. The maximum reservoir level is attained in June and July of each year in USBR Exhibit 15 so previously inundated areas would not be exposed until late summer of each year.

12. Notwithstanding the assertion of one speaker that he would use the river for recreational use when it became exposed and help others plant vegetation to restore some of the previous natural beauty, it appears the canyon's natural beauty could seldom be restored successfully even if the Board did not allow full operation.

13. The fish habitat destroyed by inundation would not be restored by occasional exposure of the river canyon during periods of receding water levels. The river would not be populated with fish by natural means unless fish migrated upstream to spawn. The Department of Fish and Game does not intend to plant catchable trout at the upper end of the reservoir. Therefore, the intermittent exposure of the river canyon would not provide a significant recreational fishery. In addition, the area would be aesthetically unattractive, making it unlikely that fishermen would go there.

There are few public access points at the lower ends of the intermittently exposed reaches of river. This difficulty of access would discourage recreational use by most people.

14. We conclude that once the reservoir has been filled the recreational and fishery values in the river canyon cannot realistically be restored by maintaining the provisions of Decision 1422. Consequently, these values carry little weight when balanced against the value of full operation of the reservoir for power storage.

15. In Decision 1422, the Tri-Dam Project of Oakdale Irrigation District and South San Joaquin Irrigation District was identified as a primary holder of prior rights. The districts and the Bureau of Reclamation entered into an agreement and stipulation

dated October 24, 1972. This agreement provided for dismissal of the districts' protests against the Bureau of Reclamation. In exchange, the Bureau of Reclamation was to deliver all the inflow to New Melones Reservoir each year up to 654,000 acre-feet for rediversion at Goodwin Dam in satisfaction of the districts' prior rights. Several other holders of prior rights also participated in the hearings which resulted in Decision 1422. The water rights granted in Decision 1422 are subject to all prior rights.

Removal of the restrictions on level of storage in Decision 1422 is not expected to affect the water supply available to the holders of prior rights downstream. The permittee is obliged to observe all prior downstream rights. Tri-Dam Project representatives have suggested that the Bureau has not met this obligation. We note that the quantity of New Melones releases to which the Tulloch operators are entitled at any given time is a very complex operational question. It depends on factors such as inflow into New Melones, amount of storage in Tulloch, and flood control responsibilities, if any, of Tulloch. Thus, any adjudication of, or enforcement action to protect, Tri-Dam Project's rights at Tulloch relative to the New Melones Project would require an extensive evidentiary examination. Such an examination cannot be accomplished in the context of the present proceeding.

Need for Additional Power Available If Storage for Power Generation In New Melones Reservoir is Approved

16. Since 1973, the need for energy and for energy generating capacity in California have increased markedly. New power sources are

needed to meet the demand. Also, the State of California has developed a goal of reducing the proportion of oil- and gas-fired electrical generation. Displacement of oil and gas is intended both to reduce ratepayer costs and to make the State less vulnerable to shortages of these fuels. Displacement of oil and gas as a source of electricity further increases the need for new power sources.

The State Energy Commission has concluded that between 1981 and 1994, the need for new electrical generating capacity in California as a whole will increase by 13,189 megawatts (MW), and the need for energy will increase by 101,503 gigawatt hours (GWh). The State Energy Commission has also concluded that a need will exist for 6,287 MW of capacity and 30,280 GWh of electrical energy from new sources in Northern California alone during this period. The on-line dates for many of the energy resources planned to satisfy these needs are uncertain. Several have experienced delays. The New Melones generators, operated with an unrestricted level of storage in the reservoir, would alleviate some of the uncertainty over whether demands will be met. At full operation, New Melones would provide 160 MW of dependable capacity and would generate an average of 476.7 GWh per year. (Dependable capacity represents the peak output of the generators available year around, even in dry years.) Currently, the dependable capacity of New Melones is 62 MW and its average generation is 352.7 GWh per year.

17. A comparison of dependable capacity and generation of power available from the New Melones hydroelectric power plants under the restriction on filling for power contained in Condition 2 of

Decision 1422, with that available without the restriction, shows that the restriction generally reduces the electrical generation and dependable capacity of the power plants. Such a comparison is outlined below.

Viewed as an average over the entire life of the project, the power losses because of the restriction on storage range from 124 to 155 GWh per year and from 98 to 140 MW of dependable capacity, based on a variety of possible future conditions.

During the next few years, the losses caused by the restrictions are somewhat smaller than average, but still significant. If the Board retains the restrictions of Decision 1422 until 1984 compared with removing the restriction immediately, the loss would be approximately 90 GWh of generation during the next ten years. If the Board retains the restrictions until 1988, the loss would be approximately 700 million GWh of generation over the next ten years. In both cases there would be substantial losses of dependable capacity.

Two reasons exist for the lower actual losses if the restriction is maintained in the near term. First, because the 1981-82 and the 1982-83 water years have produced much more than the average runoff, the reservoir is presently close to the flood control storage level identified by the Bureau. Regardless whether restrictions on amount of storage are removed, the amount of electricity generated for the next few months will be nearly the same.

Second, if the restriction is lifted, the water now in the reservoir will be held in storage in order to maintain the maximum dependable capacity and to maintain optimal head, i.e., water pressure,

on the power generators to maximize their output. If the restriction is not lifted, the water would be released as rapidly as possible after the peak runoff season without causing downstream damage, until storage was reduced to 438,000 acre-feet. (As noted above, this reduction in storage is projected to take until September 1988 to accomplish.) During the period in which the reservoir is being drawn down, more electricity would be generated than without the drawdown. However, the electricity generated during a drawdown would be generated at the expense of dependable capacity. Further, the short-term difference in electrical generation would be more than offset by the long-term increased electrical generation resulting from immediately lifting the restriction.

18. Western is responsible for marketing the power from New Melones on behalf of the United States. Because the restriction is causing losses in generation and dependable capacity, Western must purchase replacement electrical energy and capacity to meet its contractual obligations to serve its customers. Western presently has commitments to provide energy and capacity to its 72 customers based on an unrestricted storage level in New Melones Reservoir. To the extent energy and dependable capacity in amounts equal to the full storage output of New Melones are not available, Western must purchase electricity from other sources to make up the difference.

Several methods may be used to place a value on the losses in electrical output caused by the filling restriction in Decision 1422. Western provided three methods: (a) value the foregone energy at the marginal cost of energy produced in an average oil- and gas-fired generator in Northern California; (b) value both

the energy and the capacity at levels determined by the California Energy Commission staff's estimate of Pacific Gas and Electric Company's (PG&E) "avoided cost"; and (c) value the energy and capacity at the rates set by Western for its sales to its customers. By all three of these methods, the value of the lost output was in the range of \$5-10 million if the restriction on storage level is retained for one more year compared to lifting it immediately. The value of the lost output would be \$40-\$70 million if the restriction were retained until 1988. Other parties offered different valuation methods, but all produced estimates roughly comparable to those of Western.

The value of the energy and capacity foregone because of the restriction have increased markedly since Decision 1422 was adopted by this Board in 1973. In 1973, the Bureau of Reclamation valued the power from New Melones at \$30.65 per kilowatt-year and 1.0 cent per kilowatt-hour. Given two sharp price increases in the cost of world oil -- a fuel still used to generate much of the electricity California uses -- the Bureau now values the power from New Melones at 7.78 cents per kilowatt-hour and \$49 per kilowatt-year. Consequently, the annual value of power from New Melones has risen from \$9,670,000 per year to almost \$45,000,000 per year.

The sooner that the restriction on the storage level in New Melones Reservoir is removed, the lower will be Western's costs for replacement electricity and dependable capacity to serve its customers. While the Board's action will have little effect on the amount of electricity generated in 1983, it will affect the dependable capacity rating of the New Melones power plant. The dependable

capacity rating affects the amount of back-up capacity Western must purchase to meet its contractual obligations. The rating is determined by agreement between Western and PG&E. Because of the current restriction on the storage level, the power plant is rated at 62 MW of dependable capacity. This rating is much lower than it would be in the absence of the restriction, because less water for generation of electricity can be relied upon to be in the reservoir at critical periods.

If the restriction is removed, the dependable capacity rating can be increased. The amount of the increase would be negotiated between Western and PG&E. According to Western's testimony, Western and PG&E will probably place the rating somewhere between 119 MW and 202 MW. Thus, removing the restriction would probably at least double the dependable capacity rating. While it is uncertain how quickly the new rating would be established, an early date for removing the restriction on level of storage will result in a correspondingly early date for raising the dependable capacity rating.

19. The Energy Commission's evidence establishes that while utilities have a number of options for meeting the needs it has projected, the energy and capacity from New Melones would be among the least expensive of the options available.

20. While power generation is incidental to consumptive uses at New Melones, we find that compared with the situation in 1973, generation of electrical power is today a much more important benefit to be gained from that project.

21. A guaranteed market exists for the additional output of the New Melones project if the storage level restriction is removed. Since Western has already contracted for electricity sales on the basis of the output of New Melones at its full storage level, the additional electricity is pre-sold. The additional output would simply displace electricity now being purchased by Western to cover the deficiencies caused by the storage restriction.

22. Western's customers are engaged in a number of conservation programs required by Western to reduce energy waste. These programs provide assurance that power obtained from New Melones Reservoir under full operation will be reasonably used.

23. The storage level restrictions on New Melones Reservoir in Decision 1422 were intended to protect the unique recreational and aesthetic values of the Stanislaus canyon for as long as possible, until storage was necessary to meet commitments for water deliveries.

As observed previously in this Order, the current filling of the reservoir for flood control has substantially reduced the values that the restrictions in Decision 1422 were intended in part to protect. Even if the reservoir storage is reduced to the 844-foot elevation again, the recreational and aesthetic values in the canyon would be minimal. To the extent that these values can be restored by nature or otherwise, it would take many years to do so. Thus little or nothing of these values remain to be protected at this time.

Thus, the values intended to be protected by the restriction in Decision 1422 have been severely diminished since 1973, while the value of energy that could be generated with an unrestricted level of

storage in the reservoir has increased. Because of this shift in balance since 1973 between the values of the upstream area and energy, because of the increased need for electrical production, and because New Melones power can play a significant role in meeting the need for electricity in California, we find it is no longer reasonable to withhold approval of storage in the reservoir for power generation. Maintaining the current restriction, when viewed in light of today's power needs and the fact that the values of white-water boating, stream fishing and other stream-related activities have been severely impaired, constitutes a waste of water. This waste should be prevented.

The Permittee Has Firm Commitments to Deliver Water for Consumptive Uses

24. In Decision 1422, the Board directed that before the permittee would be authorized to store water in excess of the amount required for purposes of fish and wildlife preservation and enhancement, maintenance of water quality and satisfaction of prior rights, the permittee must show that it has firm commitments to deliver water for consumptive uses. The evidence establishes that the permittee has made substantial progress toward entering contracts to deliver water from New Melones Reservoir. It has negotiated with four purchasers of water within the counties of Calaveras, Stanislaus, Tuolumne, and San Joaquin. These negotiations have led to draft contracts which are now near execution.

25. In determining whether the permittee should be authorized to impound water for consumptive uses, the Board must

determine whether the permittee has "firm commitments" to deliver water for these uses.

26. When the Board adopted Decision 1422, it found that the Bureau had presented no specific plan for applying project water to beneficial use for consumptive purposes at any particular location. The Board also found that the Bureau's Central Valley Project had substantial quantities of water which were not being used and were not under contract and that the Bureau could meet its contracts for many years without using water from New Melones Reservoir. Thus, the Board concluded that the Bureau had not demonstrated an immediate need for the water to be developed by the New Melones Project. The Board saw this failure as a failure to meet in spirit the statutory requirements for approval of a permit to appropriate water. However, the Board did recognize that ultimately the full conservation yield of the project would be needed in Tuolumne, Calaveras, San Joaquin and Stanislaus Counties. Condition 4 of Decision 1422 restricts the ultimate place of use to these four counties. The Board recognized that New Melones water might also be needed for use outside the four-county area, and provided for such use -- on an interim basis -- in Condition 4.

27. Against the Bureau's failure to demonstrate an immediate need for the water from New Melones, the Board balanced the values of the area upstream of New Melones Reservoir which would be inundated. These values included whitewater recreation, stream fishing, wildlife habitat, and other stream-related activities. The Board found that because of these values the reach of river in question was a unique asset to the state and the nation.

Today, as previously found, the values of the upstream area have been substantially degraded or entirely destroyed due to flood control operations required by successive years of extraordinary precipitation. Even if the reservoir level were reduced to the 844-foot elevation as soon as possible, many years would pass before the Stanislaus River canyon upstream of the dam were restored to its original condition. Before any such restoration could be completed, the reservoir would likely refill, either because of flood control operations or the existence of fully executed water service contracts.

28. In light of the foregoing, we conclude that by requiring "firm commitments" the Board intended that the permittee demonstrate that it has a specific plan to use the water from New Melones Reservoir for consumptive purposes. While executed contracts would provide strong evidence that firm commitments exist, the Board did not intend that existence of such contracts be the exclusive means of showing firm commitments for New Melones water. Rather, the Board intended that the Bureau show a specific plan under which the conserved water will be used consumptively.

29. In 1981 the Bureau adopted a plan for allocating the water from New Melones Reservoir. For purposes of its plan the Bureau assumed that the reservoir would be operated at its full capacity. In its plan the Bureau delineated the areas in which it would deliver firm and interim water supplies and identified the recipients to whom it would offer water supplies. It assessed the need for water of each recipient based on present and future land

use and tentatively allocated the water in accordance with its assessment of the needs.

In addition, the Bureau has taken substantial steps toward executing contracts with Tuolumne County Regional Water District for 3,200 acre-feet, Calaveras County Water District for 500 acre-feet, Central San Joaquin Water Conservation District for 80,000 acre-feet, and Stockton-East Water District for 75,000 acre-feet. These amounts total 158,700 acre-feet, or 88 percent of the 180,000 acre-foot yield of the reservoir available for consumptive use contracts. Negotiation of the contracts has been concluded and the draft contracts have been circulated for public comment and reviewed by the office of the Commissioner of Reclamation. The remaining steps are resubmission of the proposed contracts to the districts and execution of the contracts. The contracts with Stockton-East Water District and Central San Joaquin Water Conservation District are expected to be executed by May or June 1983. Execution of the contract with Tuolumne County Regional Water District is expected to follow shortly thereafter.

The permittee plans to make any New Melones water supply not contracted for available first to entities within the Stanislaus River Basin, as defined by the Secretary of the Interior on June 29, 1981, and then to the Montpelier subareas on an interim basis. After the needs of the Montpelier area are satisfied, the permittee will offer New Melones water to users outside the basin.

30. The need for water in the four-county area is expected to grow over a long period. The Bureau has estimated the needs of

its proposed contractors for the next 10 to 15 years, and has drafted the proposed contracts to fill those needs rather than making the full basin allocation which is projected to be needed in about the year 2020. The contractors will be allowed to renegotiate their contracts to take more yield when they need it. When the basin users reach their full basin allocation, the purchasers of interim water for use outside the basin will cease to be served from New Melones.

31. Much evidence was presented during the hearing of an immediate need and market for interim water from the New Melones Project outside of the four-county area. Such water service could help alleviate water deficiencies and groundwater overdrafting in several parts of the San Joaquin Valley.

32. Based on the foregoing, we find that the permittee has established that it has firm commitments to deliver the full yield of New Melones water for consumptive uses. Furthermore, the evidence establishes that there is presently much more demand for New Melones water than the reservoir's yield.

33. a. Friends of the River (FOR), supported by the Planning and Conservation League and several individual witnesses, urged that removal of the Decision 1422 storage level restrictions would be premature at this time. For the reasons discussed above, we do not concur with this contention. However, the objective advanced by FOR in urging deferral for several months should be addressed. That objective was said to be to assure that beneficial use of the project yield would be reasonable and non-wasteful.

This is the first time that the permittee will be authorized to store water in New Melones Reservoir for irrigation, domestic, municipal and industrial uses in excess of that stored for satisfaction of prior rights. In authorizing these uses, the Board is approving changes in purposes of use. To ensure that the consumptive use yield of New Melones Reservoir will not be wasted or used unreasonably, the permittee should be required, as a condition of the authorization to store water for consumptive uses, to develop and implement a water conservation program. It is the policy of the Board to require a water conservation program when it approves a change in purpose of use. No party has objected to development and implementation of a water conservation program for the consumptive use of project yield.

b. Further, the federal Reclamation Reform Act of 1982, Section 210, requires water conservation measures. We find that requiring the permittee to develop and implement such a program as a condition of its authorization to store water in New Melones Reservoir for the consumptive uses listed above is not inconsistent with Congressional directives.

#### Other Matters

34. The Department of Fish and Game and the South Delta Water Agency requested that water release requirements be revised for, respectively, fish releases and water quality objectives in the southern Delta. The hearing notice described only two key issues. These are, first, whether the restriction in Condition 2 of Decision 1422 on the level of storage in New Melones Reservoir

for generation of hydroelectric power purposes should be modified to prevent waste, unreasonable use, or unreasonable diversion of water, and second, whether the Bureau has established firm commitments to deliver water for consumptive uses which would justify increased storage in New Melones Reservoir. The Board did not announce in its notice that it would consider changes in the water release requirements for water quality and for fish. Consideration of these changes is therefore beyond the scope of this proceeding. To change these water release requirements, the Board would have to consider exercising its reserved jurisdiction contained in Condition 6 of Decision 1422. It did not give notice of such consideration for the hearing upon which the order contained herein is based. Consequently, we will take no action regarding water release requirements for water quality and for fish releases at this time.

However, we note that the reservations of jurisdiction in Condition 6 remain in full force and effect. Any deliveries of water which the Bureau may make for consumptive uses are subject to changes in the Bureau's water right permits which may, in the future, be made pursuant to Condition 6. Such changes could include increases in the flows required for maintenance of water quality and for fish releases.

35. Several parties, including the Bureau, requested at the hearing in this proceeding that the Board authorize the use of water from New Melones Reservoir for consumptive purposes outside the counties of Stanislaus, Calaveras, Tuolumne, and San Joaquin.

Under Condition 4, the use of New Melones water for consumptive uses in another place is authorized if approved by the Board. Since the deliveries of water for which the Bureau has negotiated contracts are all within the four counties, no reason appeared for the Board to open its hearing to consideration of other places of use under Condition 4, and the Board gave no notice of an exercise of its reserved jurisdiction under Condition 4. Thus Condition 4 was not a subject of the Board's hearing on February 23 and 24, 1983. Before the Bureau can deliver water from New Melones Reservoir to areas outside of the four counties, the Bureau will have to file, and the Board approve, a petition to authorize such delivery. The Bureau has filed no such petition. In this proceeding we do not authorize the use of water for consumptive uses outside of the counties of Stanislaus, Calaveras, Tuolumne, and San Joaquin. However, Condition 4 remains in full force and effect as set forth in Decision 1422.

36. We note that during the hearing it was suggested that the Bureau could pick up water from New Melones Reservoir at its pumps at Tracy for delivery outside of the four counties in which the use of New Melones water is authorized, without receiving approval under Condition 4 to change the place of use. We disagree with this view. Before the permittee may serve water in areas outside the four counties, it must obtain an amendment to its permits to include other specific areas (Water Code Sections 1701, 1702). Without an amendment, the water right permits authorize use of water only in the four counties specified in Condition 4. Any

water which leaves the place of use will be subject to appropriation. It cannot augment any rights which the Bureau already has to divert water from the Delta at its Tracy pumps.

When the Bureau is prepared to deliver water to places outside of the place of use, it may petition the Board under Condition 4 to amend its permits to include such other specific places, and the Board will give the petition its consideration. Our finding herein is not inconsistent with any Congressional directive.

37. South Delta Water Agency and the Tri-Dam Project asserted that their prior water rights are being infringed by the Bureau's operation of New Melones Reservoir. While enforcement of prior rights is not a subject of this proceeding and cannot be acted upon herein, we note that the Bureau's appropriative water rights for New Melones water are subject to all downstream prior water rights. The Board is committed to protect prior water rights against infringement by the Bureau or by any other junior appropriator. Consequently, any holder of prior rights who believes that the Bureau is infringing its water rights may file a complaint with the Board requesting enforcement.

38. During the hearing the Board received no evidence which could be used to establish dry year criteria in connection with authorizing further impoundment of water in New Melones Reservoir for consumptive uses. We note that in Condition 2 of Decision 1422 the Board reserved jurisdiction for the purpose of establishing dry year criteria at the time when such impoundment is approved. Dry year criteria may become necessary at some time in the future. At

that time evidence should be taken to determine what criteria will be appropriate. Consequently, the Board will continue its reservation of jurisdiction in Condition 2 to establish dry year criteria.

39. On February 17, 1983, the California Supreme Court filed its opinion in the case of National Audubon Society v. Superior Court (No. S.F. 24368; the "Mono Lake" case). There, the Court held that before the state -- specifically including this Board -- approves water diversions it "should consider the effect of such diversions upon interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests." (Slip opinion, pp. 5-6). In light of this holding, we make the following findings and conclusions:

a. The values of the Stanislaus River Canyon upstream from New Melones Dam, sought to be protected by Decision 1422, are interests protected by the public trust.

b. Decision 1422 evidences consideration of the effect of New Melones storage diversions upon these upstream public trust interests. The storage level restrictions contained in Decision 1422 (as interpreted by Order WR 80-20) were an attempt to avoid or minimize, to the extent feasible and for so long as possible, harm to these interests.

c. Today's order is an exercise of the Board's authority and duty, pursuant to express terms of Decision 1422 and to the holdings of National Audubon Society, supra, to reconsider the allocation decisions represented by the New Melones water right permits. We have balanced the findings made hereinabove concerning

the present condition of these interests (and the condition of these interests for the foreseeable future if storage level restrictions were to be continued in force), together with the findings concerning power and consumptive use needs for diversion of the water at New Melones (and flood control needs and authority of the United States). We conclude, as a result of this balancing, that nonvested usufructuary rights to appropriate at New Melones, to the full capability of the project, should now be granted to permittee.

#### ORDER

1. Condition 2 of the order in Decision 1422 is amended to read as follows:

"Permittee shall impound in New Melones Reservoir such water as is necessary to provide (a) not in excess of 98,000 acre-feet per annum for the preservation and enhancement of fish and wildlife to be released at a rate specified by the California Department of Fish and Game, plus (b) such additional water as is necessary to maintain the water quality conditions set forth in paragraph 5. The above amounts are in addition to water stored for satisfaction of prior rights at Melones Reservoir and for flood control. The Board reserves jurisdiction for the purpose of establishing dry year criteria."

Term 19 of Water Right Permit 16597 (Application 14858), Term 18 of Water Right Permit 16598 (Application 14859), Term 18 of Water Right Permit 16599 (Application 19303), and Term 18 of Water Right Permit 16600 (Application 19304) shall be amended accordingly.

2. a. Condition 1-a of the order in Decision 1422 is amended to read as follows:

"The water appropriated under the permit is issued pursuant to Application 14858 shall be limited to the quantity which can be beneficially used and shall not exceed 980,000 acre-feet per annum by storage to be collected from November 1 of each year to June 30 of the

succeeding year. The water may be used for irrigation, domestic, municipal, industrial, preservation and enhancement of fish and wildlife, recreation and water quality control purposes."

Term 5 of Water Right Permit 16597 (Application 14858) shall be amended to be consistent with the amendment contained herein.

b. Condition 1-d of the order in Decision 1422 is amended to read as follows:

"The water appropriated under the permit issued pursuant to Application 19304 shall be limited to the quantity which can be beneficially used and shall not exceed 1,420,000 acre-feet per annum by storage to be collected from November 1 of each year to June 30 the succeeding year. The water shall be used for irrigation, domestic, municipal, industrial, preservation and enhancement of fish and wildlife, recreation and water quality control purposes."

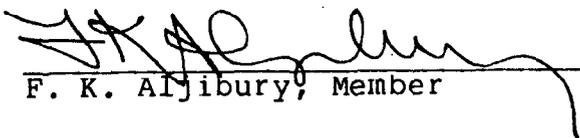
Term 5 of Water Right Permit 16600 (Application 19304) shall be amended to be consistent with the amendment contained herein.

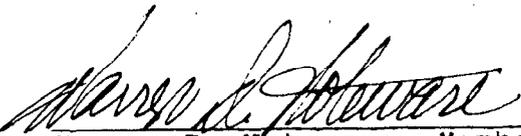
3. Permittee shall consult with the Division of Water Rights and the Department of Water Resources and develop and implement a water conservation program or actions. A progress report on development of the program shall be submitted to the Board within 6 months. The program or proposed actions shall be presented to the Board for approval within one year from the date of this order or such further time as may, for good cause shown, be allowed by the Board.

4. Except as specifically changed by this Order and by any previous orders of this Board concerning Decision 1422, all terms and conditions contained in Decision 1422 and in the permits issued pursuant to it remain in full force and effect.

Dated: March 8, 1983

  
Carole A. Onorato, Chairwoman

  
F. K. Aljibury, Member

  
Warren D. Noteware, Member

  
Kenneth W. Willis, Member